



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/574,700

04/03/2006

Takashi Shiota

207,529

1872

38137 7590 11/01/2007
ABELMAN, FRAYNE & SCHWAB
666 THIRD AVENUE, 10TH FLOOR
NEW YORK, NY 10017

EXAMINER

CUEVAS, PEDRO J

ART UNIT

PAPER NUMBER

2834

MAIL DATE

DELIVERY MODE

11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,700	Applicant(s) SHIOTA, TAKASHI	
	Examiner Pedro J. Cuevas	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 2 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,483,463 to O. J. M. Smith in view of U.S. Patent Application Publication No. 2003/0007371 A1 to Kawazoe et al., further in view of U.S. Patent No. 6,594,292 B2 to Kawasuji et al.

O. J. M. Smith disclose the construction of a system and method for alternating current machine, and apparatus therefor, comprising:

a power generator (1) comprising a first insulated winding (142) and a second insulated winding (145), wherein:

said first winding:

has a different number of turns than said second winding;

produces a lower induced voltage than said second winding; and

is connected to a first rectifier (169) which directly rectifies an alternating current power input from said first winding to a direct current power output of the first rectifier; and
said second winding:

is connected in series to a second rectifier (160) which rectifies an alternating current power input from such saturated reactor to a direct current power output of the second rectifier; and

the direct current power outputs of said first rectifier and said second rectifier are connected, in parallel (Figure 7).

However, it fails to disclose a permanent magnet type electric power generator driven by a windmill or a waterwheel and said second winding being connected in series to a saturated reactor comprising a core that becomes saturated as alternating current power input from said second winding to said core is increased, whereby an inductance value of the reactor decreases as the alternating current power input to said core from said second winding increases, said saturated reactor being connected to a second rectifier.

Kawazoe et al. disclose the construction of a using permanent magnet generator, comprising a permanent magnet type electric power generator driven by a windmill or a waterwheel, for the purpose of utilizing the potential energy of the wind or water to generate electrical power.

Kawasuji et al. disclose the construction of a saturable reactor and power source apparatus, comprising:

a saturated reactor (Figure 1) comprising a core (1) that becomes saturated as alternating current power input from said second winding to said core is increased, whereby an inductance value of the reactor decreases as the alternating current power input to said core from said second winding increases; for the purpose of providing electrical power to a pulse laser.

It would have been obvious to one skilled in the art at the time the invention was made to use the saturated reactor disclosed by Kawasuji et al. with the system and method for alternating current machine disclosed by O. J. M. Smith on the power generation apparatus disclosed by Kawazoe et al. for the purpose of utilizing the potential energy of the wind or water to generate electrical power.

4. With regards to claim 4, 7, 10 and 13, O. J. M. Smith disclose a constant-voltage power supply (163) to which the direct current power outputs of said first rectifier and said second rectifier are connected, whereby the constant-voltage power supply is charged by said direct current power outputs.

5. With regards to claims 5, 8, 11 and 14, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a battery as a constant voltage power supply, since the examiner takes Official Notice of the equivalence of a constant voltage power supply and a battery for their use in the electric power generation art and the selection of any of these known equivalents to provide a constant voltage would be within the level of ordinary skill in the art.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (571) 272-2021. The examiner can normally be reached on M-F from 8:30 - 6:00. 10574700If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

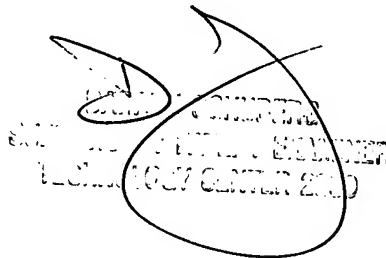
Application/Control Number:
10/574,700
Art Unit: 2834

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Pedro J. Cuevas
October 22, 2007



Stamp: RECEIVED
OCT 22 2007
EBC